FL 3011
Reports
RMK

APQ-56 Improvement Program

May 14, 1957

SYSTEM

XH-2 XH-3 NAVY	2.18	Recorder Cooling - [redacted]	STAT

XH-2 and XH-3 recorders have all been modified to provide a better cooling system. Drawings are being brought up to date and should be released next week. No further reports will be submitted on this problem.

XH-2 XH-3 NAVY	4.14	R. F. High Voltage Power Supply - [redacted]	STAT

No substantial progress has been made during the past week. Several adhesives were tried in an attempt to bond the Rexolite, but not any of the adhesives showed satisfactory results. The 3M Company has been made cognizant of our problem and they are sending us a sample of an adhesive that is suppose to give satisfactory bonding to the Rexolite material. The adhesive was expected to arrive early this week.

All	6.20	P. E. Cell - [redacted]	STAT

Three P. E. Cell Test Sets are being built and tested to establish the sensitivity of P. E. Cells. All sets have been built. The first attempt at correlation between sets with rerated lamps gives about ±6% correlation. The lamps are being rerated to give a photo cell output equal the average of all the lamps tested at ET6 rated current.

All	12.19	Pulse Cable Connectors - [redacted]	STAT

No change since last report.

Time Shared	13.20	AGC - Friedmann, [redacted]	STAT

Design a new AGC that will be less susceptible to r-f interference and to stray audio pick-up.

Drafting is checking the completed detail drawings. They expect to finish this week.

Components Engineering is attempting to get complete information on the tests that UTC applies to their coils.

Time Shared	17.15	Wide Band Receiver - [redacted]	STAT

No change since last report.

All	19.16	Receiver Design - [redacted]	STAT

Testing of the receiver components is taking longer than expected because the operating points were not definitely specified. It is hoped that final tests can be completed within the next report period.

SYSTEM

All 20.12 Pulse Width - [redacted] STAT

The line type modulator breadboard has been completed and several tests run utilizing the 6799 magnetron. An R-F envelope of 0.1 us (3db points) has been obtained but some operational difficulties have been encountered.

Investigation of the above will continue.

All 21.14 Pulse Width (Quick Fix) - [redacted] STAT

No change since last report.

All 22.11 Resolution Test Set - [redacted] STAT

A means of measuring recorder resolution is needed in the field. Eight Resolution Test Sets are being built by S. R. for the Time Shared System using commercial type construction. Assembly and wiring have been delayed because of interference of recorder cooler work for the XH-2 system. Writing of a handbook has been started. Test procedures are being prepared.

Time Shared XH-3 NAVY 24.5 Deflection Driver Drift - [redacted] STAT

No change since last report.

Sanitized Copy Approved for Release 2011/08/22 : CIA-RDP89B00487R000300580004-6

LEGEND
A - APPLY
N/A - NOT APPLICABLE
W/I - WAITING SHIPPING INSTRUCTIONS
W/S - WILL SHIP
S - SHIPPED
I - INSTALLED

SYSTEMS

KIT NO.	DESCRIPTION	TIME SHARED 01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	XH-2 01	02	03	XH-3 01	02	03	04	05	NAVY 01	XH-1 01	02	03	04	05	06	07	08	09	10	Bench Set	REMARKS
1	Recorder Cooler	S 4/16	S 4/16	S 4/23	S 3/13	S 3/13	W/S 5/15	S 5/3	*S 5/3	*S 5/3	*S 5/3	*S 5/3	S 5/1	BIP	→				I 3/25	*I 5/13	I 5/14	S 4/29	I 4/19	In New DESIGN			A	NA →											*Per Ed Arnold - Need Kit
2	Camera Cooling	I 3/15	I 3/15	S 3/29	S 3/29	S 3/29	S 3/29	S 4/24	S 4/24	S 4/24	S 4/24	S 4/24	S 4/24	BIP	→				I 5/14	*S 5/14	S 5/14	N/A →					A	NA →											*Per Ed Arnold - Need Kit
3	Camera Servo Motors	S 3/29	S 3/29	S 3/29	S 3/29	S 3/29	S 3/29	DIFFERENT DESIGN →											I 4/10	I 4/20	S 3/27	N/A →					BIP	NA →											
4	Focus & Alignment Fixture	S 4/4	S 4/4	S 4/4	S 4/4	S 4/4	S 4/4	N/A	N/A	N/A	BIP →								I 4/11	I 4/23	S 4/4	N/A →					BIP	NA →											Reshipped new contact boards 5/14/57.
5	Recorder 10 KV Power Supply	S 5/10	*W/S 5/28	*W/S 5/28	W/S 5/8	W/S 5/8	*W/S 5/28	*W/S 5/28	*W/S 5/28	*W/S 5/28	*W/S 5/28	*W/S 5/28	S 4/24	BIP	→				* A	A	A	A	A	A	A	A	BIP	NA →											*Will try(1) P.S. IN System Prior To official releasing of ALL P.S. (No W/H) **Waiting P/O #5512 Prom. 5/23
6	Power Supply Fuse Protection for 28 V.	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	BIP →								N/A →																			
7	Focus Alignment Fixture Provide for Rear Antenna Feed	*W/S 5/22	W/S 5/22	W/S 5/22	W/S 5/22	W/S 5/22	S 5/8	S 4/23	S 4/16	S 4/16	S 5/3	S 5/3	S 5/3	S 5/8	W/S 5/22	W/S 5/24	W/S 5/24	W/S 5/24	N/A →								BIP	NA →											*Waiting on P.O. #35544 Prom.(6) by 5/20 and balance by 5/22.
8	Control Panel to Prevent Synchro Damage	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	S 4/5	BIP →						I	I	I	S 4/16	I 4/17	BIP →			NA →											Need XH-2 Kit from Engrg.
9	Synchronizer - Replace Clutch in Alt. Servo.	S 5/3	S 5/3	S 5/3	S 5/3	S 5/3	S 5/3	S 5/3	S 5/3	S 5/3	S 5/3	S 5/3	S 5/3	BIP →					S 4/30	S 4/30	S 5/9	S 4/29	I 4/17	BIP →			NA →											
10	Power Supply Decrease 400 V Ripple	S 3/25	S 3/25	S 3/25	S 3/25	S 3/25	S 3/25	S 3/25	S 3/25	S 3/25	S 3/25	S 3/25	S 3/25	S 3/25	BIP →				N/A →																			
11	Maggie Seal	S 5/2	S 5/2	W/S 5/16	W/S 5/16	W/S 5/16	W/S 5/16	W/S 5/16	W/S 5/16	W/S 5/16	W/S 5/16	W/S 5/16	S 5/3	BIP →					I 4/2	I 4/5	I 4/9	S 4/29	I 4/18	BIP →			S 5/6	S 5/6	S 5/6	S 5/6	S 5/6	S 5/6	S 5/6	S 5/6	S 5/6	S 5/6	BIP	S/N 03 thru 11 now on Shipping flr. Est. 5/16 as date for kits to go out the door.
12	Ant. System Adjust Angle of Pod	N/A	N/A	N/A	N/A	N/A	S 5/8	N/A	*S 4/23	*S 4/23	N/A	BIP	N/A	N/A	BIP →	N/A	N/A	N/A	N/A →																			All papers reshipped by 5/16/57.
13	Ground Range Sweep Add Clamping Circuit	S 4/5	S 4/5	S 4/12	S 4/12	S 4/12	S 4/12	S 4/12	S 4/24	S 4/24	S 4/24	S 4/12	S 4/12	S 4/12	S 4/12	BIP	BIP	BIP	I 4/12	I 4/12	S 4/10	S 4/8	I 4/15	In New Design			BIP	N/A →										S/N 06 reshipped 5/3/57.
14	Cabling, Accessories and Waveguide	W/S 5/22	N/A	W/S 5/22	W/S 5/22	N/A	W/S 5/22	S 5/8	W/S 5/22	W/S 5/22	N/A	W/S 5/22	W/S 5/22	W/S 5/22	W/S 5/22	S 5/8	N/A	N/A	N/A →																			
15	W/G AGC Clamp Video Amp.	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/28	W/S 5/23	W/S 5/23	BIP →						W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	I 4/18	In New Design			BIP	N/A →											Waiting parts on P.O.C16715 Prom. 5/17. (Diodes)
16	Name Plates Replace Temporary	N/A →																	N/A →			S 3/29	S 3/29	N/A →														
17	Cooling Fins Maggie & Klystron	*S 5/13	*S 5/13	* A	* A	* A	* A	W/S 5/15	W/S 5/15	W/S 5/15	W/S 5/15	W/S 5/15	S 5/1	BIP →					I 4/22	S 4/22	S 4/30	I 4/3	I 4/18	BIP →			S 5/7	S 5/7	S 5/7	S 5/7	S 5/7	W/S 5/17	W/S 5/17	W/S 5/17	W/S 5/17	W/S 5/17	BIP	*Waiting To C.B. Mott. (Need Kit from Engrg.
18	Trigger Circuit (Overload at Turn-On)	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	W/S 5/23	BIP →					W/S 5/23	W/S 5/23	W/S 5/23	S 4/29	I 4/18	BIP →			N/A →											*Waiting parts on P.O. 86C16715 Prom. 5/17. (Diodes)
19	Rectifier R.F. Head	*A	A	A	A	A	A	A	A	A	A	A	A	BIP →					N/A	N/A	N/A	A	A	BIP →			N/A →											*Needs rectifiers on P.O. C-20873. Prom. - (None) as of 5/14